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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,013	06/21/2001	Takashi Nojima	35.C15470	5724
5514	7590	01/12/2004		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
			EXAMINER HUFFMAN, JULIAN D	
			ART UNIT 2853	PAPER NUMBER

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,013

Applicant(s)

NOJIMA, TAKASHI

Examiner

Julian D. Huffman

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-28 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-17, 20, 23, 37 and 38 is/are rejected.
- 7) ☒ Claim(s) 18, 19, 21, 22, 24-28, 39 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 6 October 2003 has been entered.

Response to Amendment

2. In response to the preliminary amendment, the examiner is presently interpreting the conveyance angle detection pattern writing member to refer to the scale (element 11 or 33).

Claim Objections

3. Claim 26 is objected to because of the following informalities:

In claim 26, the term recording means may be unclear.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 13, 15/13, 16, 20/16, 23/16 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Osaki et al.

Osaki et al. disclose a method for producing a scale provided coaxially and integrally with a conveying roller and adapted to detect a conveyance rotation angle, the method comprising the steps of:

integrating the conveying roller with a conveyance angle detection pattern writing member coaxially mounted with the conveying roller (column 10, lines 4-6); and

holding a recording medium conveyance outer peripheral portion of the conveying roller integrated with the conveyance angle detection pattern writing member (inherent, the conveying roller must be held to provide accurate rotation angle allotment), and performing rotation angle allotment on the conveyance angle detection pattern writing member to form a scale for detecting the conveyance rotation angle (6);

wherein the writing member is integrally provided with a conveying roller drive transmitting means (2);

wherein, in the recording apparatus, a detecting device for detecting angle information provided on the scale is provided so as to be of the same phase as the

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driven roller with respect to the axis of the conveyance outer peripheral portion of the conveying roller (figs. 1 and 2)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14, 15/14, 17, 20/17, 23/17, 26/17 and 38 rejected under 35 U.S.C.

103(a) as being unpatentable over Osaki et al. in view of Morioka et al.

Osaki et al. disclose everything claimed with the exception of a magnetic encoder.

Morioka et al. disclose a magnetic encoder and detector biased therefrom (column 8, lines 3-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the optical scale of Osaki et al. with a magnetic scale biased to a magnetic detector for the purpose of eliminating reading errors caused by dust (column 1, lines 16-32).

Allowable Subject Matter

8. Claims 18, 19, 21, 22, 24-28, 39 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regards to claims 18, 19, 21, 22, 24, 25, 27, 28, 39 and 40, the prior art of record does not disclose an ink jet recording apparatus in the combination. Osaki et al. is directed towards a photoreceptor drum of an electrophotographic printing apparatus. It would not be feasible to modify Osaki et al. to print using an ink jet printing apparatus and there would be no motivation for one having ordinary skill in the art to modify the conveying roller of an ink jet printing apparatus with nonanalogous subject matter directed towards the photoreceptor drum of an electrophotographic printing apparatus.

With regards to claim 26, the prior art of record does not disclose a detector elastically biased against the scale in the invention of Osaki et al. There is no motivation to provide an elastically biased scale in Osaki et al. since the conveying roller is always maintained at a constant distance from the detector due to the roller rotating about its central axis.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (703) 308-6556. The examiner can generally be reached Monday through Friday from 9:00 a.m. to 5:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, can be reached at (703) 308-4896. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JH

December 31, 2003



Thinh Nguyen
Primary Examiner
Technology Center 2800